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Jeff Scott, Director, Land Division
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February 21, 2019

COMMENTS ON TENTATIVE REVISION OF WASTE DISCHARGE REQUIREMENTS (WDRs) ORDER R5-2012-0107 FOR L & D LANDFILL, SACRAMENTO COUNTY

Dear Mr. Busby,

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) issued tentative waste discharge requirements for the L & D Landfill (Facility) for public comment on **22 January 2019**. The Notice of Public Hearing (NOPH) required that interested parties wishing to comment on this item must submit testimony, evidence, if any, and/or comments in writing to the Central Valley Water Board no later than by 5:00 p.m. on **21 February 2019**.

Rosemont Advocates for a Clean/Safe Environment (RACE) is a community group made up of residents in the Rosemont residential community whose boundary is located less than one mile northeast of the L & D Landfill property boundary. Therefore, RACE is an interested party.

RACE has reviewed the tentative WDRs and is alarmed that the Central Valley Water Board is considering adopting the tentative WDRs. RACE has concluded that the tentative WDRs Order R5-2019-XXXX do not comply with title 40 Code of Federal Regulations (CFR) part 257 and part 258, Criteria for Municipal Solid Waste Landfills (MSWLF) and California Code of Regulations, title 27 Division 2 (Solid Waste). RACE bases its findings on the following comments that are respectfully submitted for the public record:

1. **Lack of Proper Public Notification.**

   A. **United States Environmental Protection Agency (US EPA).** The NOPH did not include the US EPA as an interested party even though it is in charge of overseeing implementation of 40 CFR part 257 and part 258 by approved States. The tentative WDRs allow unlined Landfill 1 (LF-1) to accept up to 5% municipal solid waste (MSW) and Landfill 2 (LF-2) to accept up to 20% MSW. Please see tentative WDRs Discharge Specifications B.6 and B.7 respectively. Unlined LF-1 does not have a base liner system that complies with 40 CFR part 258 and Title 27 section 20800(a)(2) MSW Landfill Requirements. LF-2 in the tentative WDRs is listed as a "New MSWLF". The Central Valley Water Board did not comply with Title 27 section 21730, Public Participation when seeking to notify interested parties.

   B. **Citizen Groups and Supply Well Owners Within 1-Mile of Facility Boundary.** Title 27 section 21730 requires the Central Valley Water Board to ensure adequate public participation involving "classification of units" or "revision of WDRs for classified Units." The Central Valley Water Board did not notify citizen groups such as Rosemont Community Association or RACE of its intent to classify LF-2 as a "New MSWLF". Also, as a new MSWLF the Central Valley

Water Board must comply with section 21730(a)(6) for MSW landfills where a release has occurred beyond the facility boundary. Finally, the Central Valley Water Board has not sought public participation for supply well owners within 1-mile of the Facility boundary who might be interested in commenting on the fact that the tentative WDRs propose to extend the active life of the Facility by 8 years (See Finding 6a). Extending the active life also extends the threat of contamination of surrounding supply wells due to releases of constituents of concern (COCs) from the Facility.

2. **Circumvention of MSWLF Regulations (40 CFR part 258) for unlined LF-1.** The tentative WDRs establish unit classification criteria not found in 40 CFR part 258 regulations and Title 27 regulations that exempts unlined LF-1 from being classified as an MSWLF landfill. Title 27 section 20164 defines an "MSW Landfill" or "municipal solid waste landfill unit" as "any landfill, other than a Class I landfill, that received municipal solid waste (MSW) **at any time** and that has received any solid waste since October 9, 1991." (emphasis added) The tentative WDRs in Findings 9 and 10 acknowledge that unlined LF-1 in the past has received MSW. However, The Central Valley Water Board goes on to establish classification criteria (underground regulations) not found in 40 CFR part 258 or Title 27 by using terms such as "small fraction" or "relatively small percentage (e.g., <10 percent) of waste stream" or "limited Class III" when seeking to exempt LF-1 from subjection to MSWLF regulations. The statement in Finding 10 that "these WDRs find that LF-1 is not subject to Subtitle D regulations and is not an MSW landfill unit" is arbitrary since it does not find its basis in the regulations.

   Furthermore, for the sake of argument if it was true that a very small percentage of MSW was disposed of in unlined LF-1 it would stand to reason that unlined LF-1 would pose a very limited threat for contamination of groundwater quality since LF-1 was predominantly filled with construction and demolition (C&D) waste. However, in Finding 44 of the tentative WDRs a 1988 Solid Waste Assessment Test (SWAT) investigation found that the upper aquifer at the Facility was impacted due to volatile organic compounds (VOCs) released from LF-1. The SWAT investigation found concentrations of trichloroethylene (TCE) up to 10 ug/L, tetrachloroethylene (PCE) up to 5 ug/L, 1,1-dichloroethane (1,1-DCA) up to 10 ug/L, 1,2-dichloroethylene (1,2-DCE) up to 55 ug/L, and vinyl chloride up to 8 ug/L in shallow groundwater along the downgradient perimeter of the landfill.

   These concentrations are 2 times (2x) the primary maximum contaminant level (1st MCL) for California drinking water standards for TCE, at the 1st MCL for PCE, 2x the 1st MCL for 1,1-DCA, 5x the 1st MCL for 1,2-DCE, and 16x the 1st MCL for vinyl chloride. The SWAT investigation indicates that waste other than C&D waste was placed in unlined LF-1 in quantities significant enough to impair the drinking water beneficial use of the upper aquifer.

3. **Tentative WDRs continue to allow operation of unlined LF-1 as an Open Dump.** Facilities that fail to satisfy the criteria or practices described in 40 CFR 257 for a C&D landfill (40 CFR 257.3-4) or 40 CFR 258.1(g) and (h) are considered open dumps as defined by 40 CFR 257.2. LF-1 has taken MSW in the past as described in Comment 2 above but has not complied with the Federal deadline for closure or retrofitting the landfill with a composite liner where the public record shows that groundwater impairment has occurred.

4. **Vertical Expansion over unlined LF-1 constitutes a "New Unit".** The "existing footprint" (lateral boundary of a WMU) of any landfill not only defines the lateral extent of a WMU but due to slope stability issues also defines the maximum vertical height that a WMU can achieve and still meet static and dynamic slope stability requirements. The existing footprint of unlined LF-1 at the time of promulgation of Federal Regulations in October 9, 1991 determined what maximum height LF-1 could attain and still meet slope stability requirements. It is unclear what that height is since the tentative WDRs do not define the existing footprint size of LF-1 as of October 9, 1991. Any vertical expansion of LF-1 above the maximum height it could achieve without buttressing against

LF-2 (a lateral expansion) would be considered a "new unit" constructed above LF-1 and would be subject to 40 CFR 258 regulations. This rationale is supported by Title 27 section 20080(d) Existing and New Units where it states that "all other Units (including expansions and reconstruction of existing Units initiated after November 27, 1984) are "new" Units. Neither US EPA nor California EPA envisioned nor intended unlined WMUs where groundwater impacts are occurring to continue to be operated beyond their physical limitations due to slope stability issues. Buttressing the perimeter of an "existing footprint" to allow continued placement of waste in an unlined WMU is considered practices intended to circumvent regulations.

5. **No Antidegradation Analysis Provided for Quantifying Unlined LF-1 Discharges.** Finding 94 of the tentative WDRs states that "this Order requires the Dischargers to maintain the Facility so as to contain waste within the WMUs, thereby preventing degradation of water quality. Accordingly, this Order complies with Antidegradation Policy." The Finding is flawed because LF-1 is an unlined WMU; there is no containment i.e., base liner system installed to contain leachate and landfill gas. Furthermore, there is no leachate collection and removal system (LCRS) installed in LF-1 so a simple mass balance analysis of LF-1 begs the question: where is the leachate going? The leachate and gas is not being contained in LF-1 because it is an unlined waste management unit. Therefore, an antidegradation analysis is required to determine the amount of leachate being released, the concentrations/mass of constituents of concern (COCs) in the leachate and what best practicable treatment or control can be implemented to minimize the release of leachate and landfill gas from LF-1. This analysis should consider final closure of LF-1 as a viable control and/or corrective action method. It was not uncommon in the past for the Central Valley Water Board to require final closure of an unlined WMU as the appropriate corrective action measure for minimizing the release of leachate and landfill gas from an unlined WMU. Title 27 section 20950(a)2(A)1 Closure states that "the goal of closure, including but not limited to the installation of a final cover, is to minimize the infiltration of water into the waste, thereby minimizing the production of leachate and gas. For such Units, after closure, the final cover constitutes the Unit's principal waste containment feature." Installation of a final closure cover would serve as a control for minimizing the production of leachate and gas.

6. **Inadequate Financial Assurances for Maintaining Groundwater Separation Through Corrective Action Measures.** The Discharger is currently maintaining groundwater separation requirements at LF-1 due to groundwater pumping as shown in Attachment C of the tentative WDRs. In Finding 35 it states that the upper aquifer begins at around -16 feet MSL. Finding 58 indicates that waste may have been placed in LF-1 at -15 feet MSL or lower and that there is concern that there is inadequate groundwater separation between waste in unlined LF-1 and groundwater including any capillary fringe. Currently, the Discharger is pumping groundwater to address an ongoing release of VOCs from the Facility. The groundwater pumping is also providing the added benefit of providing some groundwater separation below LF-1. If groundwater pumping must be used to provide adequate groundwater separation the tentative WDRs must require the Discharger to provide financial assurances to ensure that groundwater pumping will continue so long as the Facility continues to degrade water quality. At Yolo Central Landfill the Central Valley Water Board recently adopted WDRs which required that if the Discharger proposes to rely on groundwater pumping to maintain groundwater separation the Discharger must provide financial assurances that covers the cost of pumping groundwater for 450 years. These tentative WDRs must include the same requirements if the same method is used for maintaining groundwater separation.

7. **Failure to Provide Historical Regulatory Context to Proposed Changes.** The tentative WDRs omit critical information regarding the regulatory history of the Facility that is needed for the Central Valley Water Board to make an informed decision on whether to adopt the tentative WDRs at a publically held meeting as well as providing necessary information to interested parties who wish to comment on the proposed action at the publically held meeting. For example,

Finding 10 of the current WDRs Order R5-2012-0107 states that "the landfill is a former gravel quarry and is subject to the provisions of Government Code section 66758 that prohibits a regional board from permitting a new landfill or lateral expansion of an existing landfill at sites that were used to mine gravel or sand unless the regional board finds that discharges to a new facility or expansion of an existing facility will not pollute or threaten to pollute the waters of the state. In 1996, the Discharger proposed lateral expansion of the landfill into the LF-2 area and requested a variance based on the relatively low threat composition of the waste stream (mostly inert construction and demolition debris), the declining percentage of green waste in the waste stream due to recycling efforts, and the fact that the expansion landfill would be compositely lined. The Central Valley Water Board granted the Discharger's request by issuing WDRs Order 96-177 that included requirements for the composite-lined LF-2 expansion area." This information is critical in determining the adequacy of the siting and geologic criteria.

Secondly, in Finding 68 of the current WDRs provides a closure plan where all WMUs are planned to be closed by October 2023. The tentative WDRs do not provide this information to the public or the Central Valley Water Board. This information is critical for the Central Valley Water Board to determine if it needs to honor its previous decisions.

Thirdly, the tentative WDRs do not provide historical context how the Facility has expanded laterally and vertically beginning with footprint 45 acres expanding to a footprint of 156 acres and beginning with a vertical height of -16 feet MSL and ending with a proposed height of 140 feet MSL. The current WDRs limited the maximum landfill height to 97 feet MSL. This information is critical for the Central Valley Water Board to determine if it needs to honor its previous decisions.

Forthly, the tentative WDRs do not give the historical CEQA compliance context that all lateral and vertical expansions were approved under Negative Declarations meaning that the Lead Agency did not consider the lateral or vertical expansions as potentially causing significant environmental impacts. This information is critical for the Central Valley Water Board to determine if the Discharger has engaged in activities that intend to circumvent the State and Federal regulations.

8. **Failure to Honor Contract Made With Local Residents.** The current WDRs Order R5-2012-0107 provided assurances that:

   A. The Facility height would not exceed 97 feet MSL;

   B. The Facility would close in approximately 2023; and

   C. The Central Valley Water Board would honor its contract with the public by requiring the Discharger to close its Facility once the facility reached the height of 97 feet MSL.

   The current WDRs did not allude to the fact that there was a possibility that the Facility would be vertically expanded to 140 feet MSL and close approximately 8 years later. These regulatory documents that authorize incremental expansion as mentioned in Comment 7 above are indications that the Regulatory Authorities cannot be trusted to keep their commitments which they are making when they place limitations in their Orders which the public relies upon to decide whether or not to contest the regulatory action. The Central Valley Water Board has repeatedly allowed the Discharger to continue to operate and expand unlined LF-1. LF-1 has not only expanded vertically but laterally as well. It has expanded laterally since it originally began at -16 feet MSL which is below the surrounding grade. Unless the gravel pit in which LF-1 was constructed had sheer vertical side walls there is no way that LF-1 could have reached its current elevation due to slope stability issues unless it expanded laterally along the side slopes of the gravel pit, essentially using them as buttresses.

9. **Inadequate CEQA Review.** The City of Sacramento published the Final Negative Declaration for the L & D Landfill Vertical Expansion Project (Z18-112) on 18 December 2018. L&D Landfill. The CEQA review is inadequate for the following reasons:

   A. The Facility has received four consecutive negative declarations since 1996 yet as described in the Comment 8 has expanded laterally and vertically which has significantly increased impacts to groundwater quality, aesthetics, and transportation.

   April 1996: Negative Declaration (SCH# 1996022044);
   June 2012: Negative Declaration (SCH# 2012062047);
   October 2015: Negative Declaration (SCH# 2015082050); and
   December 2018: Negative Declaration.

   B. The Lead Agency has incrementally allowed the Facility to expand, to change its waste streams, and its operations without requiring an Environmental Impact Report (EIR).

   C. The Lead Agency did not notify RACE that it responded to comments submitted by RACE on the proposed Negative Declaration. Their failure to notify RACE by email or by letter of its response to RACE's comments did not allow RACE to contest the Lead Agency's final determination.

   D. The Lead Agency did not properly address comments regarding the proposed final landfill height of 140 feet MSL. The Lead Agency essentially said that the Discharger had already placed soil at an elevation of approximately 120 feet MSL which is slightly less than the proposed 140 feet MSL and therefore it did not seem to be a problem.

   E. The Lead Agency did not acknowledge that Central Valley Water Board staff was raising significant water quality concerns at the Facility that should have at least triggered a mitigated Negative Declaration.

   F. The Lead Agency did not consider that the proposed vertical expansion would extend the operational life of the Facility by 8 years, which is a significant impact to the residents in the surrounding areas.

10. **Inadequate Controls to Separate Waste Disposal Between unlined LF-1 and lined LF-2.** Finding 3 and Finding 12 of the tentative WDRs describe different waste characteristics that are allowed to be placed in landfill units. Certain wastes are allowed to be placed in lined LF-2 that are not allowed to be placed in unlined LF-1. The tentative WDRs do not have containment specifications that ensure that leachate and gas generated from waste placed in LF-2 does not migrate into unlined LF-1. The proposed vertical expansion does not have controls i.e. physical barriers that prevent migration of leachate and gas from LF-2 to unlined LF-1.

11. **Infeasibility to Monitor LF-1 and LF-2 Separately Due to Vertical Expansion.** Finding 40 states of the tentative WDRs state that due to LF-1 and LF-2 not being contiguous the Discharger must monitor the two WMUs separately. It identifies MW-30R and MW-31R as locations where other monitoring devices may be installed. However, the area identified will become buried under waste if the vertical expansion over LF-1 and LF-2 is approved.

12. **Tentative WDRs do not characterize waste in unlined LF-1 and associated threat and complexity**. Finding 95 of the tentative WDRs characterize the Facility as having a threat and complexity of 2-B. Finding 15 states that "the composition and volume of leachate generated at LF-1 is unknown given that it is unlined and does not have an LCRS sump." Title 27 sections 20200(c) and 21740 requires the Discharger to characterize the waste which by definition includes leachate that could be released from a WMU. The leachate must be characterized before it is released from the WMU e.g., before it enters the unsaturated zone below the WMU. Characterizing the leachate by analyzing concentrations of COCs in groundwater detection wells is invalid since the samples taken in downgradient groundwater monitoring wells is not

representative of leachate characteristics since it has been diluted by groundwater. Furthermore, unlined LF-1 does not have unsaturated zone monitoring devices and the tentative WDRs do not require the Discharger to install devices in the unsaturated zone to provide more representative samples of leachate characteristics.

13. **Tentative WDRs Do Not Address Leachate Release from Unlined LF-1.** An unlined WMU without a LCRS by design releases leachate into the environment. This is obvious if one considers two WMUs constructed adjacent to each other with one WMU having a base liner system and associated LCRS and the other unlined and without an LCRS. During the wet season the same amount of precipitation falls on each WMU. The Discharger is removing leachate from the LCRS in the lined WMU. Where is the leachate going that reaches the bottom of the unlined WMU? Is it accumulating and building up at the bottom of the unlined WMU? Certainly not! It is being discharged to the surrounding environment. Such is the case with unlined LF-1 constructed adjacent to lined LF-2. One can expect that the amount of leachate being removed from lined LF-2 is the amount of leachate that is being released to the environment from unlined LF-1. The tentative WDRs must either address how the Discharger will collect and remove leachate reaching the bottom of the unlined LF-1 before it is released to the environment or as stated in Comment 5 perform the appropriate antidegradation analysis.

14. **Unlined LF-1 Does Not Meet Class III Non-MSW or MSW Construction Standards.** Title 27 Table 2.1 states that Nonhazardous Solid Waste Class III landfills that do not meet siting and geologic criteria must have a single clay liner and LCRS (See note 12). Title 27 section 20260(a) states that Nonhazardous Solid Waste Class III landfills "shall be located where site characteristics provide adequate separation between solid waste and waters of the state. This groundwater separation requirement applies to reclassification of existing landfills at disposal sites approved at Class II-2 and any expansions of such landfills. L & D landfill was at one time classified as a Class II-2 landfill; therefore section 20260(a) applies to existing WMUs and any expansions of such WMUs. Groundwater separation is determined where site characteristics determine groundwater separation, not creating separation through groundwater pumping. Title 27 Table 3.1 reiterates what was stated above. Class II-2 WMUs must meet the geologic setting requirements of New Class III WMUs. Title 27 section 20260(b)(2) states that where site characteristics alone do not ensure protection of the quality of groundwater or surface water, Class III landfills shall be required to have a single clay liner with hydraulic conductivity of 1×10^{-6} cm/sec or less. Table 4.1 reiterates this requirement for Non-MSW landfills and also requires that if a clay liner is required a LCRS must also be installed. Unlined LF-1 does not meet the current standards for Class III Non-MSW or Class III MSW landfills. The classification of LF-1 must be revisited each time the Discharger proposes to vertically expand the WMU. Not considering this reevaluation of the containment requirements is to circumvent Federal and State regulations. If this were allowed Dischargers would be actively seeking ways to vertically expand unlined WMUs to high heaven to avoid having to construct WMUs the meet more stringent waste containment requirements.

15. **Numerous Errors and Omissions in the Tentative WDRs.** Numerous errors and omissions in the tentative WDRs indicate that the tentative Order was hastily prepared. Below are a sample of errors and omissions that were discovered:

    A. Omission of prohibition related to treated wood waste;

    B. Contradictory error in Finding 9: "…prohibit the discharge of waste from municipal and household sources to LF-1 and limit the Discharge of MSW to LF-1 to five percent…."

    C. Omission of a groundwater water supply inventory required by Title 27 section 21750(h)(1) and as common practice provided in other WDRs adopted by the Central Valley Water Board.

    D. Omission of information in Finding 84 and 87.c.

E. Contradictory error in G. Monitoring Specifications G.3. The specification requires the Discharger to establish an unsaturated zone monitoring system for all WMUs but Finding 29 states that it is unfeasible for LF-1. Central Valley Water Board does not provide results of a feasibility study to support the infeasibility of installing an unsaturated zone monitoring system for LF-1.

In conclusion, based on the comments above, **Rosemont Advocates for a Clean/Safe Environment** (RACE) does not find that the Tentative WDRs as written comply with Federal and State regulations for the protection of groundwater resources. This is especially true with unlined LF-1 WMU since the tentative WDRs authorize the expansion of unlined waste management unit LF-1 which has in the past and continues to release leachate and landfill gas into the environment. RACE recommends closure of unlined LF-1 with a final closure cover as stipulated in current WDRs Order R5-2012-0107; there is no reason why unlined LF-1 needs to continue to receive waste. Furthermore, RACE recommends that the Central Valley Water Board honor its previous commitment made in the current WDRs to the people of the state of California by limiting the maximum height of L & D landfill to 97 feet MSL. Ongoing vertical expansion and potentially future requests for lateral expansion within a former gravel pit does not serve the best interests of the people of the state of California and is not protective of precious and scarce groundwater resources for future generations.

RACE respectfully asks that an email be sent to the email address below as soon as this letter is received electronically acknowledging receipt of these comments by the deadline. We also request that all future communication including responses to these comments be sent by US mail as well as email to:

Rosemont Advocates for a Clean/Safe Environment (RACE)
P.O. Box 2814, Rancho Cordova, CA 95741
Email: rosemontadvocates@gmail.com

RACE may consider contested the WDRs if the responses to our comments do not adequately address our concerns and RACE does not believe revisions to the tentative WDRs prior to the Board meeting go far enough to ensure compliance with State and Federal Regulations and the public interests of the surrounding communities.

cc:

John Moody, Title 27 Permitting and Mining Unit, CVRWQCB, Rancho Cordova (email only)
Alyssa Gagnon, Permitting & LEA Support, Cal Recycle, Sacramento (email only)
Jonalyn Bajurin, Financial Assurances, Cal Recycle, Sacramento (email only)
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